Developers

IBM

Get to the Web with RPG/400

by Dr G B Perotti, AS/400, IBM Italy

Dr. Perotti joined IBM Italy in 1966 and divided his time betwen management and professional activities. He was always attracted to application development. One major development project was AS/400* Application Dictionary Services, currently part of 5769PW1 App Dev ToolSet. He is currently supporting, as Program Manager, AS/400 Web enablers and is the webmaster of *www.easy400.ibm.it*
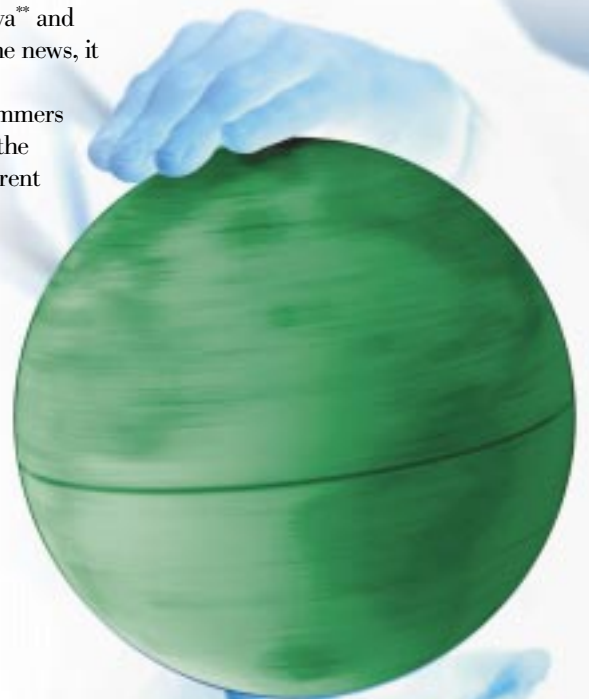
Do you know Report Program Generator (RPG)? Do you want to develop Web applications without the need to learn Java, Visual Basic, Perl, Net.Data or even Visual RPG?

It is not surprising that while Java** and Websphere** continue to make the news, it is RPG that makes the business. However, not many RPG programmers know that they may easily enter the e-business arena using their current skills and knowledge.

For the last twenty years, RPG has been a popular development language for IBM midrange computers. System/3, System/32, System/34, System/38*, System/36* and AS/400 encompass a full generation of RPG programmers.

We have developed a site – *www.easy400.ibm.it* – where RPG programmers can learn how to develop dynamic Web pages using *Common Gateway Interface* (CGI) standard, the Rothman service program and HTML, as many RPG programmers are unaware of how easy it is for them to create Web pages.

The site is subscribed to by several thousand programmers, from seventy different countries worldwide and endorsed by the most popular AS/400 sites, such as NEWS/400, Ignite400, and MidrangeComputing.

Common Gateway Interface (CGI)

AS/400 supports the CGI standard which establishes the way a program is invoked from a remote Web browser. It allows AS/400 programmers to build their own dynamic Web pages using their preferred languages: C++, ILE C, ILE COBOL, and ILE RPG.

A CGI program is transaction-oriented: it receives a request, process it, provides a response to the remote browser and quits. Its input and output operations in the network are performed through HTTP API's.

Rothman's service program

The service program developed by Mel Rothman at IBM Rochester Lab, is a recommended start to CGI programming. This program

- provides simplified access to HTTP API's, thus relieving programmers from extensive tests

- allows the capacity to externally define HTML responses in text source members, in a way that is similar, but easier than DDS. Separating presentation from program logic has always been the key to development productivity.

Developing CGI with Rothman's service program is even easier than developing traditional 5250 interactive programs. The whole of the site is based on this technique and nuts and bolts of the program are explained in detail in the tutorials.

Conclusion

- CGI is a cross platform standard for the Internet.

- AS/400 is fully compliant.

- CGI will put the lightest load on an HTTP server

- Rothman's service program eases RPG CGI development by
  - hiding API complexities
  - separating program logic from output presentation

- HTML is a very simple, yet still very powerful script language for Web presentation.

- All you will need to get started is a HTML pocket manual

- ILE RPG implications are moderate.

- If you know RPG III, you already know more than 95 per cent of what's needed. The rest you can learn while delivering production code.

- No prerequisites are necessary on your AS/400, provided it runs at least OS/400* V3R2M0.

The 'easy as /400' site is fully dedicated to Rothman's service program. It provides demonstrations, sample code, tutorials and utilities to download at no charge for a fast startup in the Web arena. With this method, you will be developing Web pages within your first week!

For more information

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